REMARKS

Claims 1-42 are pending. Claims 1, 12, 20, 31, and 41 are in independent form.

In the present Response, applicant has assumed that the Office action mailed October 3, 2007 is not final and that claims 39-42 also stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515") and U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560"). If these assumptions are in error, applicant respectfully requests that the present response be considered *bona fide* and that a new action on the merits be issued to clarify the status of these issues.

Rejections under 35 U.S.C. § 103(a)

In the office action mailed May 1, 2008, <u>claims 1 and 20</u> were rejected under 35 U.S.C. § 103(a) as obvious over a combination of the following four references:

-U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515");

-U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560");

-U.S. Patent No. 5,806,060 to Borgida et al. (hereinafter "Borgida"); and

-U.S. Patent No. 5,930,788 to Wical et al. (hereinafter "Wical '788").

Claim 1 relates to a machine-implemented method that includes receiving, from a user, a primary term representing a first concept to be added to a machine-readable network of interrelated concepts, receiving, from the user, at least one related term associated with the primary term and representing the first concept, receiving at least one relationship between the first concept and a second concept, receiving a relationship type characterizing the at least one relationship, receiving a strength value characterizing the at least one relationship, representing the association between the primary term and the at least one related term, the at least one

relationship, and the relationship type to the user on the user interface, receiving a user request to add the first concept to the machine-readable network of interrelated concepts, and in response to the user request, adding the first concept to the machine-readable network of interrelated concepts. A concept comprises a normalized semantic representation. Adding the first concept to the machine-readable network of interrelated concepts includes adding the primary term, the related term, the relationship between the first concept and the second concept, the relationship type, and the strength value to the machine-readable network of interrelated concepts.

Claim 20 relates to one or more computer-readable media comprising program code tangibly embodied in machine-readable format and operable to cause one or machines to perform operations. The operations include activities that are related to those recited in claim 1.

The rejections of claims 1 and 20 contend that it would have been obvious for one of ordinary skill to have combined Wical '515, Wical '560, Borgida, and Wical '788 and to have arrived at the recited subject matter.

Applicant respectfully disagrees. As discussed in the response filed February 4, 2008, both claims 1 and 20 relate to the addition of a concept to a machine-readable network of interrelated concepts. Moreover, a user is involved in these additions. For example, claims 1 and 20 both recite that a primary term and a related term that represent the same first concept are received from a user and added to a machine-readable network of interrelated concepts. Further, a relationship type and a strength value are also added.

Applicant submits that none of Wical '515, Wical '560, Borgida, and Wical '788 describe or suggest such an addition of a concept to a machine-readable network of interrelated concepts. Accordingly, none of Wical '515, Wical '560, Borgida, and Wical '788 would make the recited addition obvious to those of ordinary skill.

For example, Borgida describes a system in which a knowledge base management system is used in conjunction with a data base management system to create a "virtual data base management system." *See, e.g., Borgida*, col. 4, line 56-61. According to Borgida, the retrieval of information from data base management systems using queries is often difficult. For example, query languages are not simple, schema are complex, and the formulation of queries often requires detailed understanding of both the query language and the schema. *See, e.g., Borgida*, col. 1, line 50 – col. 2, line 34.

Borgida describes that a virtual data base management system can be used to obtain data from a data base management system using a schema and a query language that are independent of the schema and query languages used in the data base management system itself. *See, e.g., id.*, col. 5, line 1-7. In particular, data can be obtained using "concepts" in a knowledge base system that are pertinent to the domain being investigated. *See, e.g., id.*, col. 5, line 13-19. Further, these "concepts" can be used directly in the queries. *See, e.g., id.* One of the reasons that Borgida takes this approach is the ability to "incorporate new concepts" into the knowledge base system. *See, e.g., id.*, col. 5, line 20-22.

Even if one of ordinary skill were to consider Borgida's "concepts" to comprise normalized semantic representations (a contention with which applicant disagrees), Borgida neither describes nor suggests that these "concepts" can be represented by a primary term and a related term, or that incorporation of Borgida's "concepts" into a knowledge base system includes adding such a primary term and a related term, along with a relationship type and a strength value, as recited in claims 1 and 20. Indeed, this failure appears to be relates to the both the structure of Borgida's knowledge base system as well as the use of the knowledge base system to obtain data from a data base management system.

In this regard, Borgida's knowledge base system is preferably implemented using the

CLASSIC description language-based knowledge base management system. *See, e.g., id.,* col. 6,

line 32-36. According to Borgida,

> "[d]escription language-based knowledge base management systems take descriptions of concepts or of individual objects which are written in a description language and classify the concepts or the individual objects, that is, they find their relationship to all of the concepts or individual objects which are already in the data base. Classification relies on the ability of the knowledge base management system to find a generalization (or subsumption) relationship between any pair of terms expressed in the description language. Classification finds all previously-specified descriptions that are more general (i.e., that subsume) the new one, and all previously-specified descriptions that are more specific (i.e., that are subsumed by) the new one. They can find which of the more general ones are most specific, and which of the more specific ones are the most general, and place the new one in between those. This yields a generalization ordering among the descriptions--a partial ordering based on the subsumption relationship. The partial ordering may be thought of as a hierarchy, although most description languages permit any description to have multiple more general descriptions, and thus do not yield a strictly hierarchical ordering." *See id.,* col. 6, line 36-57 (emphasis added).

Thus, "concepts" in Borgida's knowledge base management system are ordered based on

a single type of relationship (i.e., subsumption relationships). *See also id.,* col. 7, line 14-40

(describing example subsumption relationships); col. 7, line 41-59 (describing the integration of

a "new concept into the hierarchy of concepts"). Further, there is no description or suggestion

that these subsumption relationships are characterized via a strength value, as recited of the

relationships between concepts in claims 1 and 20. Indeed, the use of a "strength value" would

appear incongruous in the context of subsumption relationships. For example, the "concepts"

"mother," "father," "customer," and "New Yorker" are all subsumed by the concept "person."

See, e.g., Borgida, col. 7, line 16-40. Applicant is at a loss to understand how a relationship type

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or a strength value can be assigned to relationships between these "concepts" and "person." In particular, mothers, fathers, customers, and even New Yorkers are all understood to be persons in the same way.

Perhaps unsurprisingly, the incorporation of new "concepts" into Borgida's knowledge base management system reflects these characteristics. In this regard, Borgida describes that a user can define these "concepts" in the knowledge base management system either directly or by specifying a collection to be converted into a concept. *See, e.g., id.*, col. 8, line 23-28. In the case of a directly defined "concept," a classifier simply does the reclassification necessary to add the new concept to the hierarchy of "concepts." *See, e.g., id.*, col. 8, line 28-31. In the case of a "concept" defined by means of a collection, a query processor makes a new "concept" from the collection and provides it to classifier for addition into the hierarchy of "concepts." *See, e.g., id.*, col. 8, line 31-33.

Borgida describes the definition of a "concept" by means of a collection, and the addition of such a "concept," in cols. 8- 10. In brief, after a user defines a conceptual query, the conceptual query is translated into a "collection specifier 511," and individuals that are specified by the collection specifier are collected. *See, e.g., id.*, col. 9, line 1-5, 21-24, 25-36. If a user finds the collection of individuals to be particularly useful for analysis purposes, the collection specifier 511 can be made into a permanent part of the hierarchy of "concepts." *See, e.g., id.*, col. 9, line 44-47; col. 10, line 59-67.

Thus, not only do the "concepts" in Borgida's knowledge base management system differ fundamentally from the concepts recited in claims 1 and 20, the incorporation of these "concepts" into the knowledge base management system also differs from the addition of a concept to a network of interrelated concepts, as recited in claims 1 and 20. As discussed above,

claims 1 and 20 both recite that a primary term and a related term that represent the same first concept are received from a user and added to a machine-readable network of interrelated concepts. Further, claims 1 and 20 both recite that a relationship type and a strength value are also added.

The remaining cited references (i.e., Wical '515, Wical '560, and Wical '788) do not remedy these deficiencies in Borgida. In this regard, Wical '515 is primarily concerned with the classification of terminology using a knowledge catalog. *See Wical '515*, entitled "Learning System for Classification of Terminology." Wical '560 is primarily concerned with a search system that uses a knowledge base. *See Wical '560*, entitled "Concept Knowledge Base Search and Retrieval System." Wical '788 is primarily concerned with disambiguating and validating categories that have been preliminarily classified for terms in a document using a knowledge base. *See Wical '788*, entitled "Disambiguation of Themes in a Document Classification System."

Perhaps unsurprisingly, Wical '515, Wical '560, and Wical '788 describe many features that are not related to the addition of a concept to a network of interrelated concepts at all. The present rejections ignore this and instead contend that these unrelated features render the recited subject matter obvious.

For example, the rejections of claims 1 and 20 are understood to contend that the receipt of a user query in Wical '560 describes the receipt, from a user, of a related term that is associated with a primary term, where both the primary and related terms represent a concept that is to be added to a machine-readable network of interrelated concepts, as recited in claims 1 and 20. *See Office Action mailed May 1, 2008*, page 3, paragraph 9 (citing Wical '560, col. 29-32).

Applicant respectfully disagrees. Wical '560 does not describe or suggest that the query terms are to be added to a machine-readable network of interrelated concepts, as recited of the "related terms" in claims 1 and 10. Instead, Wical '560 is understood to receive query terms as part of the process of searching using a knowledge base by associating terms in documents with categories of a classification system *to develop contextual associations for the terminology in the documents. See, e.g., Wical '560,* col. 4, line 39-44; col. 31, line 6-17. Applicant respectfully submits that developing contextual associations for terminology in documents does not describe or suggest the addition of a concept to a network of interrelated concepts, as recited in claims 1 and 20.

As another example, the rejections of claims 1 and 20 are understood to contend that the receipt of an input term whose use is classified using a knowledge catalog describes the receipt, from a user, of a related term that is associated with a primary term, where both the primary and related terms represent a concept that is to be added to a machine-readable network of interrelated concepts, as recited in claims 1 and 20. *See Office Action mailed May 1, 2008,* page 3, paragraph 9 (*citing Wical '515,* col. 4, line 49-65).

Applicant respectfully disagrees. As discussed previously, Wical '515 describes a system for the automated learning and classification of terminology. *See, e.g., Wical '515,* col. 1, line 12-14. The terminology learned and classified in Wical '515 are not "concepts" which, as recited, comprise "normalized semantic representations." Instead, terminology in Wical '515 are individual words or phrases. *See, e.g., Wical '515,* col. 3, line 14-17.

This distinction is also apparent in the excerpt of Wical '515 at col. 4, line 49-65 relied upon by the rejection. For the sake of convenience, this cited excerpt is now reproduced.

"For an example input term, 'short-term', the <u>learning system attempts to select a category that best defines the use of the term in the document set.</u> For this example, the document set is generally about short-term financial instruments, including short-term loans and short-term investments, such as stocks and bonds. <u>To learn the term, the learning system may select the high level category 'business and economics' as the learned category for the input term 'short-term.'</u> Although the document set includes themes about 'business and economics' generally (e.g. short-term financial investments), the input term 'short-term' may be more specifically defined. Thus, if categorized in the 'business and economics' category, the term 'short-term' would be learned at too high of a level (e.g. the associated meaning of the 'business and economics' category is too broad for the term 'short-term' used in the context of the document set)." *See Wical '515*, col. 4, line 49-65 (emphasis added).

Thus, the input term received in Wical '515 is not a related term that is associated with a primary term, where both the primary and related terms represent a concept that is to be added to a machine-readable network of interrelated concepts. Instead, the use of the received input term in a document set is defined through the selection of a category.

As yet another example, the rejections of claims 1 and 20 are understood to contend that the disambiguation processing that validates preliminarily classified categories in Wical '788 describes or suggests the addition of a primary term, a related term, a relationship type, and a strength value to a machine-readable network of interrelated concepts, as recited in claims 1 and 20. *See Office Action mailed May 1, 2008*, page 4, lines 1-5 (*citing Wical '788*, Table 1 and col. 9, line 14-39).

Applicant respectfully disagrees. As discussed above, Wical '788 is primarily concerned with disambiguating and validating categories that have been preliminarily classified for terms in a document using a knowledge base. *See, e.g., Wical '788*, col. 1, line 65-col. 2, line 11. In Wical '788, disambiguation processing determines, for terms preliminarily assigned to a category, whether a category classified for a term is valid by analyzing other categories classified for other terms of the document. *See, e.g., id.*

In order to disambiguate such preliminary classifications, Wical '788 describes that a "thematic profile" of a document can be used. *See, e.g., Wical '788,* col. 7, line 25-46. A document's thematic profile identifies the most important themes or topics in the paragraphs of the document. *See, e.g., Wical '788,* col. 7, 39-40. For each paragraph theme, a theme strength or theme weight that measures content of an individual theme is calculated. *See, e.g., Wical '788,* col. 7, 46-48. The theme strengths quantify the strength or importance of a corresponding paragraph theme relative to other paragraph themes. *See, e.g., Wical '788,* col. 7, 51-55.

In some cases, the theme weights of document themes can be summed and compared against a theme weight for another document. *See, e.g., Wical '788,* col. 9, line 63-67. Table 1 in Wical '788 (cited in the rejection) is an example preliminary document classification profile with theme strengths that can be summed and compared. *See, e.g., Wical '788,* col. 9, line 66-col. 10, line 17.

Thus, the theme strengths in Wical '788 are not strength values that characterize a relationship between concepts in a network of interrelated concepts. Further, the use of theme strengths in Wical '788 does not describe or suggest that a primary term, a related term, a relationship type, and a strength value be added to a machine-readable network of interrelated concepts, as recited in claims 1 and 20.

Indeed, the reliance on Wical '515, Wical '560, and Wical '788 appears to stem from a fundamental misunderstanding. In this regard, the rejections appear to contend that the terminology in documents and search queries are concepts, as recited in claims 1 and 20. Applicant respectfully disagrees. As discussed previously, terms are not concepts that, as recited, comprise "normalized semantic representations." Instead, terms are individual words or phrases.

Indeed, the cited references themselves agree with this interpretation. For example, Wical '515 itself acknowledges this distinction between concepts and terminology. For example, Wical '515 distinguishes between the terminology that is learned and classified and a knowledge catalog 150 that is used in these processes. Wical '515's knowledge catalog 150 includes a set of static ontologies. *See, e.g., Wical '515*, col. 7, line 37-39. These static ontologies provide views of views, characterizations, and organizations of concepts or categories. *Id.*, col. 7, line 39-42. Wical '515's learning and classification of terminology does not change these static ontologies, which is perhaps unsurprising since the learned and classified terminology are not concepts or categories that comprise normalized semantic representations of the sort found in an ontology.

Since the cited references do not themselves consider terms and terminology to constitute concepts or categories, one of ordinary skill would also not reasonably consider terms and terminology to be concepts, as recited. Indeed, the Examiner's continued insistence on ignoring the teachings of not only applicant's specification but also the teachings of the cited references is both puzzling and improper. Should the Examiner persist in the contention that terms and terminology are concepts, Applicant respectfully requests that the Examiner set forth with particularity why both Applicant and the cited references are incorrect.

Borgida, Wical '515, Wical '560, and Wical '788 thus all fail to describe or suggest features recited in claims 1 and 20, such as receiving, from a user, a primary term and a related term that both the represent a single concept that is to be added to a machine-readable network of interrelated concepts. Borgida, Wical '515, Wical '560, and Wical '788 also fail to describe or suggest that such a primary term and related term, along with a relationship type and a strength value, are to be added to a machine-readable network of interrelated concepts.

Thus, even if Borgida, Wical '515, Wical '560, and Wical '788 were combined, one of ordinary skill would not arrive at the recited subject matter. Accordingly, claims 1 and 20 are not obvious over Borgida, Wical '515, Wical '560, and Wical '788. Applicant respectfully requests that the rejections of claims 1, 20, and the claims dependent therefrom be withdrawn.

Claims 12 and 31 were rejected under 35 U.S.C. § 103(a) as obvious over a combination of the following three references:

-U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515");

-U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560"); and

-U.S. Patent No. 5,806,060 to Borgida et al. (hereinafter "Borgida").

Claim 12 relates to a machine-implemented method that includes receiving, from a user, a request to edit a first concept in a machine-readable network of interrelated concepts, representing the first concept on a display for the user, receiving, from the user, at least one new relationship between the first concept and a second concept, receiving a relationship type characterizing a type of the at least one new relationship, receiving a strength value characterizing a strength of the at least one new relationship, updating the machine-readable network of interrelated concepts to reflect the at least one new relationship, the relationship type, and the strength value, and representing the updated first concept on the display for the user. Representing the first concept on a display includes displaying a collection of one or more terms that express the first concept and a description of one or more existing relationships between the first concept and other concepts in the machine-readable network of interrelated concepts. A concept comprises a normalized semantic representation. The display includes a description of the at least one new relationship.

Claim 31 relates to one or more computer-readable media comprising program code tangibly embodied in machine-readable format and operable to cause one or machines to perform operations. The operations include activities that are related to those recited in claim 12.

The rejections of claims 12 and 31 are based on the contention that requests to verify classifications of terminology in Wical '515 constitute a request to edit a concept in a network of interrelated concepts. Applicant respectfully disagrees. As discussed above, the claims recite that a concept comprises a normalized semantic representation. The terminology that are learned and classified in Wical '515 are not such "concepts." Instead, terminology in Wical '515 are individual words or phrases. *See, e.g., Wical '515*, col. 3, line 14-17. Indeed, Wical '515 itself acknowledges this distinction between concepts and terminology. For example, Wical '515 distinguishes between the terminology that is learned and classified and a knowledge catalog 150 that is used in these processes. Wical '515's knowledge catalog 150 includes a set of static ontologies. *See, e.g., Wical '515*, col. 7, line 37-39. These static ontologies provide views of views, characterizations, and organizations of concepts or categories. *Id.*, col. 7, line 39-42. Wical '515's learning and classification of terminology does not change these static ontologies, which is perhaps unsurprising since the learned and classified terminology are not concepts or categories that comprise normalized semantic representations of the sort found in an ontology.

Since Wical '515 does not consider its terminology to constitute concepts or categories, such as those found in its static ontologies, one of ordinary skill would also not reasonably consider Wical '515's terminology to be concepts, as recited. Indeed, the Examiner's continued insistence on ignoring the teachings of not only Applicant's specification but also the teachings of Wical '515 is both puzzling and improper. Should the Examiner persist in the contention that

Wical '515's terminology are concepts, Applicant respectfully requests that the Examiner set forth with particularity why both Applicant and Wical '515 are incorrect in considering the terminology to be different from concepts that comprise normalized semantic representations.

Accordingly, since Wical '515's terminology are not concepts, Wical '515 does not describe or suggest a number of features recited in claims 12 and 31. For example, Wical '515 neither describes nor suggests that a request to edit a first concept in a network of interrelated concepts be received from a user. As another example, Wical '515 neither describes nor suggests that at least one new relationship between a first concept in a network of interrelated concepts and a second concept be received.

Borgida and Wical '560 do not remedy these deficiencies. In this regard, as discussed above, the primary concern of Wical '560 is a search system that uses a knowledge base. According to Wical '560, a knowledge base can include a plurality of categories and terminology that are arranged hierarchically. *See, e.g., Wical '560*, col. 2, line 54-55. A knowledge base can be augmented to include contextual information (e.g., associations). *See, e.g., Wical '560*, col. 6, line 8-13. FIG. 4 of Wical '560 illustrates an example portion of such a knowledge base. *See, e.g., Wical '560*, col. 3, line 27-28.

Wical '560 describes that its search system "permits a user to subsequently augment the classification and contextual information [of the knowledge base] through content processing of the documents input by the user." *See, e.g., Wical '560*, col. 6, line 17-20. It is this augmentation to which the rejections point as allegedly constituting the receipt of a new relationship between first and second concepts, as recited in claims 12 and 31. *See Office Action mailed October 3, 2007*, page 6, second paragraph (citing Wical '560, col. 6, line 7-21).

Applicant respectfully disagrees. In this regard, attention is respectfully directed to the description of "content processing" in Wical '560. *See Wical '560*, col. 27, line 14-col. 31, line 31. Wical '560's content processing system includes a linguistic engine 700, a structured output section 710, a theme vector processor 750, and a content indexing processor 770. *See, e.g., Wical '560*, FIG. 13; col. 27, line 15-21. This system receives a set of documents 130 as input. *See, e.g., Wical '560*, FIG. 13; col. 27, line 22-23. The content processing system takes the documents, tags them using contextual, thematic, and stylistic tags, extracts topics and content carrying words, and generates theme concepts and document theme vectors.

Based on this processing, content indexing processor 770 can develop new categories in a classification hierarchy. *See, e.g., Wical '560*, FIG. 13; col. 27, line 22-23. In particular, content indexing processor 770 uses contextual tags and thematic tags to identify head words that represent the content-carrying words in the documents. *See, e.g., Wical '560*, col. 30, line 16-27. At least one contextual relationship for each head word is noted. *See, e.g., Wical '560*, col. 30, line 30-31. The head words and their contextual relationships are used to arrange a hierarchical structure of "new categories," which is mapped to the pre-existing categories of the classification hierarchy. *See, e.g., Wical '560*, col. 30, line 40-43. In this way, indexing processor 770 can develop new categories to extend the pre-existing categories of a knowledge base 155. *See, e.g., Wical '560*, col. 30, line 35-47.

Applicant respectfully submits that such a development of new categories in a knowledge base by Wical '560's content processing system neither describes nor suggests that a request to edit a first concept in a network of interrelated concepts be received from a user, or that at least one new relationship between a first concept in a network of interrelated concepts and a second concept be received. For example, Wical '560's content processing is not understood to involve

a request to edit concepts at all. Instead, Wical '560's content processing develops new categories based the mapping of the new category hierarchy to the pre-existing category hierarchy. Moreover, there is nothing that describes or suggests that new relationships for existing concepts in a network of interrelated concepts can be received. Instead, Wical '560 appears to be solely concerned with the development of new categories.

As for Borgida, Borgida also neither nor suggests that his "concepts" can be edited, much less that a request to edit such a "concept" be received from a user. Furthermore, Borgida neither describes nor suggests that at least one new relationship between a first concept in a network of interrelated concepts and a second concept be received. Instead, Borgida describes that new "concepts" can be added, either directly by a user or by a user who specifies a collection to be converted into a "concept."

Borgida, Wical '515 and Wical '560 thus fail to describe or suggest the same features. Accordingly, even if Borgida, Wical '515 and Wical '560 were combined, one of ordinary skill would not arrive at the subject matter recited in claims 12 and 31. Accordingly, Applicant respectfully requests that the rejections of claims 12, 31, and the claims dependent therefrom be withdrawn.

Claim 41 was rejected under 35 U.S.C. § 103(a) as obvious over a combination of the following three references:

-U.S. Patent No. 6,101,515 to Wical et al. (hereinafter "Wical '515");

-U.S. Patent No. 6,038,560 to Wical et al. (hereinafter "Wical '560"); and

-U.S. Patent No. 5,806,060 to Borgida et al. (hereinafter "Borgida").

Claim 41 relates to a user display that includes an identifier of a first concept in a machine-readable ontology of concepts, a list of two or more terms that represent the first concept, a list of two or more parent/child relationships between the first concept and other concepts in the ontology, a list of two or more child/parent relationships between the first concept and other concepts in the ontology, and a list of two or more lateral relationships between the first concept and other concepts in the ontology. A concept comprises a normalized semantic representation.

Although it is made under 35 U.S.C. § 103(a), the rejection of claim 41 is understand to contend that FIGS. 9C and 10A-10B in Wical '560 "[disclose] a user display as recited in" claim 41.

Applicant respectfully disagrees for several reasons. For example, FIG. 9C in Wical '560 shows a response to a query includes that includes groups which satisfy at least a portion of an input query. *See, e.g., Wical '560*, col. 23, line 1-3. Even if one of ordinary skill were to consider these groups to be concepts that comprise normalized semantic representations in an ontology of concepts, the groups are plainly not represented by a list of two or more terms, nor is a list of two or more lateral relationships between groups displayed.

As for FIGS. 10A and 10B in Wical '560, they too illustrate a response to a search query. *See, e.g., Wical '560*, col. 24, line 56-58. In FIG. 10A, the response to a search query "Internet" includes the identification of a category "Computer networking," as well as a collection of other terms (i.e., "Internet Credit Bureau, Incorporated", "Internet Fax Server"...) that relate to the search query. *See, e.g., Wical '560*, col. 24, line 60-65. The category "Computer networking" is plainly not represented by a list of two or more terms, nor is a list of two or more lateral relationships between "Computer networking" and other groups displayed.

In FIG. 10b, the response to a user selection of the category "computer networking" is shown. *See, e.g., Wical '560*, col. 25, line 7-8. In response to this selection, a plurality of subcategories, documents that contain information about computer networking, but are classified under different categories, and categories related to the computer networking category are displayed. *See, e.g., Wical '560*, col. 25, line 8-25. The subcategories of "Computer networking" are plainly not represented by a list of two or more terms, nor is a list of two or more lateral relationships between "Computer networking" and other groups displayed.

Wical '515 and Borgida do not remedy these deficiencies in Wical '560. For example, the categories in Wical '560's knowledge base are always shown in conjunction with other portions of the knowledge base in hierarchical or directed graph format. *See, e.g., Wical '560*, col. 3, line 27-28.

As for Borgida, as discussed above, the "concepts" in Borgida's knowledge base management system are ordered based on a single type of relationship (i.e., subsumption relationships) and "represented," if at all, by a single term.

In contrast, claim 41 recites that, in addition to an identifier of a concept, a display includes lists of two or more terms that represent the concept, parent/child relationships, child/parent relationships, and lateral relationships. One example of such a display is shown in FIG. 4 of Applicant's specification. Such lists are believed to present significant advantages vis-à-vis Wical '560's hierarchical or directed graphs. In particular, as the number of terms representing a concept, the number of parent/child relationships, the number of child/parent relationships, and the number of lateral relationships increases, the recited display is believed to be much more adept at presenting information in a format that is accessible to a user.

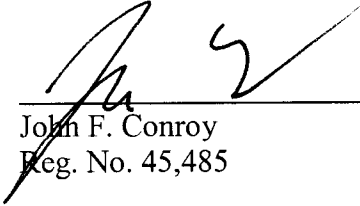Accordingly, claim 41 is not obvious over Borgida, Wical '515, and Wical '560.

Applicant respectfully requests that the rejections of claims 41 and 42 be withdrawn.

It is believed that all of the pending claims have been addressed. However, the absence

of a reply to a specific rejection, issue, or comment does not signify agreement with or

concession of that rejection, issue, or comment. In addition, because the arguments made above

may not be exhaustive, there may be reasons for patentability of any or all pending claims (or

other claims) that have not been expressed. Finally, nothing in this paper should be construed as

an intent to concede any issue with regard to any claim, except as specifically stated in this

paper, and the amendment of any claim does not necessarily signify concession of

unpatentability of the claim prior to its amendment.

No fees are believed due at this time. Please apply charges or credits to deposit

account 06-1050.

Respectfully submitted,

Date: July 1, 2008

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